

To the attention of the Chief Editor:

On behalf of all authors, I am pleased to submit our manuscript “Pixels to Pachyderms: Dual Framework Testing for Predicting Elephant Habitat Suitability” to *Remote Sensing in Ecology and Conservation*. This study presents a fully reproducible workflow for modelling elephant habitat suitability, built with careful attention to transparency and replicability.

For decades, managers and conservationists have sought reliable predictions of species habitat suitability to guide conservation actions. Our study advances this effort by introducing a spatially optimized dual-framework SDM that integrates Automated Machine Learning and Ensemble SDM approaches. Using fine-scale telemetry data from elephants in South Africa’s *Kariega Game Reserve*, we trained high-performing models to predict habitat suitability before and after restoration actions. The resulting maps reveal temporal and spatial habitat shifts, offering insights for future corridor planning. The reserve’s fence removal served as a natural experiment to analyse range expansion, and we further projected a matriarchal model under future bioclimatic scenarios.

Given the journal’s emphasis on conservation through bridging technical innovation in remote sensing and ecological modelling, we believe our reproducible dual-framework workflow aligns strongly with its scope. Computational environments were locked using `renv`, allowing other researchers to fully replicate our work even be trained and deployed to any corner of the globe.

Having considered the guidelines of the intellectual property rights, the study was carried out under the supervision of Bring the Elephant Home organisation and Kariega Game reserve who extensively supported in providing the telemetry datasets of elephants and supporting in conducting the management intervention.

This manuscript is not under review elsewhere, and all authors have approved its content. We declare no conflicts of interest and believe our findings contribute to both ecological modelling and open-sourced & responsible research practices. We appreciate your consideration and welcome the opportunity for rigorous peer review.

Best wishes